EXECUTIVE SUMMARY

This report presents the results of continued soil vapor extraction (SVE) system monitoring, a pulse study, and a description of the soil site investigation for Site 914 at Hill Air Force Base (AFB). The principal sources of contamination at Site 914 are JP-4 and JP-8 releases during fueling events.

During the past year, SVE system monitoring has included groundwater sampling, monthly groundwater and LNAPL level data collection, updating the air quality permit and providing semi-annual reporting of air samples, vacuum readings from within the radius of influence, and system modification. Groundwater sample analysis indicates that T-914-005 is the only monitoring well containing VOC contamination. Monthly groundwater and LNAPL level data collection indicates that depths to groundwater and LNAPL and LNAPL thickness appear to be consistent with seasonal fluctuations in groundwater elevation. Air sampling and reporting indicated that the system produces emissions below *de minimus* levels established by the State of Utah Department of Environmental Quality, Division of Air Quality. Vacuum readings indicated that shutting the system down for pulsing had an influence on the soil vapor probes; however, there was not enough data to draw any conclusions. The system was modified in an effort to increase operation efficiency.

Finally, a pulse study was performed after the system modifications to determine overall effectiveness of the SVE system. Based on the findings of this pulse study, Montgomery Watson has recommended that the SVE system be left in place but used only on an as needed basis, such as following any future spills at the site. This recommendation is based on the economic feasibility of continued system operation when contaminant removal is decreasing.